George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama 35812

QD-M-002
REVISION D
Effective Date: October 15, 2004

ORGANIZATIONAL INSTRUCTION

MAINTAINABILITY PROGRAM PLAN

OPR(s)	**OPR DESIGNEE**
QD10, QD20, QD30, QD40	**Prince Kalia**

CHECK THE MASTER LIST AT: http://inside.msfc.nasa.gov/MIDL/
VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		11/19/97	
Revision	A	7/1/99	Changes made to reflect new organization code changes and/or changes made to reflect new directives renumbering scheme.
Administrative	N/A	8/28/00	OPR and/or OPR Designee change due to personnel transfer or other administrative reason. No other change to the document has been made.
Revision	B	09/04/02	Format and numbering change to implement requirements of QS-A-001 rev F.
Revision	C	10/20/03	Complete Revision.
Revision	D	10/15/04	Updated OI to implement HQ Rules Review in accordance with CAITS Action # 04-DA-01-0387) (Utilizing the word "Shall" for all requirements, removing ambiguity, removing non-requirements, etc.) .

Maintainability Program Plan

1. PURPOSE, SCOPE, APPLICABILITY

1.1 Purpose

The purpose of this Organizational Instruction (OI) is to describe the process that shall be used for development, evaluation and approval of a Maintainability Program Plan (MPP).

1.2 Scope

The development of a MPP early in program/project Formulation is vital to achieving a final design that meets program/project maintainability requirements.

1.3 Applicability

This OI shall be applicable to S&MA personnel supporting program/projects that require or specify maintainability requirements.

2. DOCUMENTS (Applicable and/or Reference)

2.1 Applicable Documents

NPD 8720.1	NASA Reliability and Maintainability (R&M) Program Policy
NASA-STD-8729.1	Planning, Developing and Managing an Effective Reliability and Maintainability (R&M) Program
MPD 8720.1	MSFC Reliability and Maintainability Program for Space Systems

2.2 Reference Documents

MIL-STD-470	Maintainability Program for Systems and Equipment
MPG	Maintenance Planning Guide – Air Force Aeronautical Systems Center – 1 Nov 2001

3. DEFINITIONS

All definitions applicable to this OI are addressed in NASA-STD-8729.1.

4. INSTRUCTIONS

NASA-STD-8729.1 identifies and describes the various Maintainability Engineering tasks that shall be implemented throughout a program/project acquisition process. The Maintainability Program Plan serves to document the selection, tailoring, and implementation of the maintainability tasks for a specific program/project. As a minimum, the Maintainability Program Plan shall include a description of how the maintainability program shall be conducted to ensure compliance with all applicable maintainability requirements (programmatic and technical), detailed description of each maintainability task, and description of the integration of maintainability activities with other related program activities (e.g., reliability, testability, and logistics). MIL-STD-470 can be used for guidance in development of the Maintainability Program Plan.

The Maintainability Program Plan may be a standalone plan, combined with the program/project Reliability Program Plan, or included as part of the program/project Safety and Mission Assurance Plan. The Maintainability Program Plan shall be developed early in program/project Formulation, and is a living document that shall be revised as necessary throughout the life of the program/project.

Establishing the maintainability engineers as an active participant in the design team is a key objective of the Maintainability Program Plan. This is the most effective way to ensure that the maintainability plan reflects the current design and also has an opportunity to influence the future design. Additionally, all assumptions and groundrules used throughout the design process shall be fully documented and understood.

5. NOTES

5.1 Records

Records	**Repository**	**Period of Time**
Maintainability Program Plan	As specified by the project plan.	As specified by the project plan.

6. SAFETY PRECAUTIONS AND WARNING NOTES

None.

7. APPENDICES, DATA, REPORTS, AND FORMS

None.

8. RECORDS

None

9. TOOLS, EQUIPMENT, AND MATERIALS

The user shall define any tools, special equipment, or materials used during the maintainability effort.

10. PERSONNEL TRAINING AND CERTIFICATION

Training shall include maintainability requirements definition and analysis.

11. FLOW DIAGRAMS

None.